# IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF VIRGINIA NORFOLK DIVISION

ACTIVEVIDEO NETWORKS, INC., a Delaware corporation,

Plaintiff,

Civil Action No. 2:10cv248 (RAJ/FBS)

v.

VERIZON COMMUNICATIONS, INC., a Delaware corporation, VERIZON SERVICES CORP., a Delaware corporation, VERIZON VIRGINIA, INC., a Virginia corporation, and VERIZON SOUTH INC., a Virginia corporation, JURY TRIAL DEMANDED

Defendants.

### FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff ACTIVEVIDEO NETWORKS, INC. ("ActiveVideo Networks") for its first amended complaint against defendants VERIZON COMMUNICATIONS, INC. ("Verizon Communications"), VERIZON SERVICES CORP. ("Verizon Services"), VERIZON VIRGINIA, INC. ("Verizon Virginia"), and VERIZON SOUTH INC. ("Verizon South") (collectively "Verizon") alleges as follows:

### **PARTIES**

- 1. ActiveVideo Networks is a Delaware corporation with its principal place of business at 333 W. San Carlos St., Suite 400, San Jose, California 95110.
- 2. ActiveVideo Networks began developing the technology for interactive systems used to deliver content in the early 1990's. ActiveVideo currently provides interactive television technology and services to various companies in the United States, including system design and layout, hardware and software as needed, as well as the delivery of content. ActiveVideo Networks owns valuable intellectual property rights in interactive television.

- 3. On information and belief, defendant Verizon Communications is a Delaware corporation with its corporate headquarters at 140 West Street, New York, NY 10007.
- 4. On information and belief, defendant Verizon Services is a wholly owned subsidiary of Verizon Communications and is a Delaware corporation with its principal place of business at 1320 North Court House Road, Arlington, VA 22201.
- 5. On information and belief, defendant Verizon Virginia is a wholly owned subsidiary of Verizon Communications and is a Virginia corporation with its principal place of business at 703 East Grace Street, Richmond, Virginia.
- 6. On information and belief, defendant Verizon South is an indirect subsidiary of Verizon Communications and is a Virginia corporation with its principal place of business at 703 East Grace Street, Richmond, Virginia.
- 7. On information and belief, Verizon makes, uses, provides, offers for sale and/or sells interactive television systems, devices, and/or services, referred to in advertisements as the FiOS system and services. On information and belief, FiOS is a trademark owned by Verizon.

## **JURISDICTION AND VENUE**

- 8. This action arises under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq.*, for infringement by Verizon of patents owned by ActiveVideo Networks. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338.
- 9. This Court has personal jurisdiction over Verizon because, on information and belief, Verizon does business and/or maintains a principal place of business in the State of Virginia and has sufficient contacts with the State of Virginia to satisfy both the requirements of due process and Rule 4(k)(2) of the Federal Rules of Civil Procedure. On information and belief, Verizon maintains a principal place of business in and has engaged in acts of infringement within the Eastern District of Virginia.
- 10. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b) & (c) and 1400(b).

#### THE FIOS SYSTEM AND SUBSCRIBERS

11. On information and belief, the basic structure of the FiOS system is as shown below:

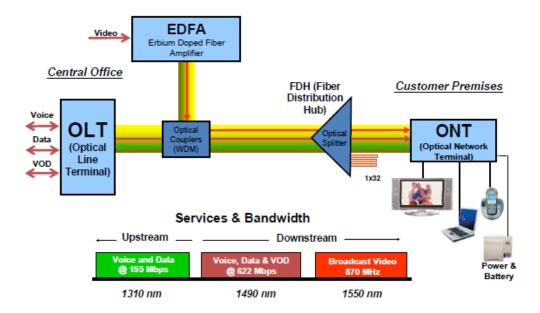


Figure 1. BPON FTTP Architecture

- 12. On information and belief, the FiOS system consists of a network that can send and receive digital signals including video, voice, and data over fiber optic lines or coaxial cable; a headend and/or central office capable of storing video, voice and data; and a node for receiving requests from a home interface controller, commonly referred to as a set-top box and/or remote control, associated with a subscriber television. The FiOS system can receive requests, instructions, and/or other data from the home of the end user to provide video and interactive services, including responding to customer inquiries, customer selections of movies and other services and information.
- 13. On information and belief, Verizon uses the interactive services patented by ActiveVideo Networks and enabled by the FiOS system, to attract customers away from competing companies. Upon launching the FiOS system, Verizon began and continues to market the FiOS system's interactive services as a critical differentiator over its competition. On information and belief, Verizon has been successful in attracting millions of new subscribers.

Said success is due to Verizon's ability to utilize the innovations claimed in the ActiveVideo Networks patents asserted in this complaint.

- 14. Verizon charges its customers a monthly fee for subscribing to the FiOS network as well as charging for other services such as video-on-demand, pay per view, and other services.
- 15. On information and belief, Verizon charges third parties also known as content providers for allowing said third parties to sell their products on the network. But for the use of the interactive services covered by the claims of the ActiveVideo Networks patents asserted in this complaint, Verizon would be unable to attract said customers and would not have secured the subscription revenue and the revenue for the interactive services.

### **FIRST CLAIM FOR RELIEF**

## (Infringement of U.S. Patent No. 6,034,678 by Verizon)

- 16. ActiveVideo Networks realleges and incorporates by reference the allegations stated in paragraphs 1 through 15.
- 17. ActiveVideo Networks is the owner of United States Patent No. 6,034,678 (the '678 patent), entitled "Cable Television System With Remote Interactive Processor." The '678 patent was duly and legally issued by the Patent and Trademark Office on March 7, 2000. A true and correct copy of the '678 patent is attached as **Exhibit 1**.
- 18. Verizon's FiOS system directly infringes at least independent claim 1 of the '678 patent because, as described previously, the FiOS system provides for the interactive delivery of information services to subscriber televisions over a cable distribution network. An exemplary chart showing how an exemplary product, *i.e.*, the FiOS system and services related to video-ondemand, is believed to infringe claim 1 of the '678 patent is attached as **Exhibit 6**.
- 19. Verizon, by making, using, providing, offering for sale and/or selling in the United States interactive television systems, devices, and/or services, including the FiOS system and services, that are covered by one or more claims of the '678 patent, has not only committed acts of direct infringement, but also acts of contributory and/or inducement of infringement of one or more claims of the '678 patent. Verizon induces and or contributes to the infringement of

the '678 by advertising to and allowing other companies that supply video-on-demand, widgets, and interactive program guides, and other services, to use the previously described FiOS system.

- 20. In or around 2004 and 2005, Verizon conducted a detailed review of ActiveVideo Networks' technology, which included access to and evaluation and use of ActiveVideo Networks software and source code. In addition, Verizon installed two servers loaded with ActiveVideo Networks software in at least two separate Verizon locations. During this review, Verizon was able to extract said code and evaluate and understand ActiveVideo Networks products and system. Said acts by Verizon constituted actual knowledge of ActiveVideo Networks' technology and ActiveVideo Networks is informed and believes that Verizon had actual or constructive knowledge of the ActiveVideo Networks' patents from at least 2004.
- 21. On information and belief, Verizon's infringement has been with full knowledge of the '678 patent at least the reasons described in Paragraph 20, *supra*, and is, has been, and continues to be willful and deliberate. Despite knowing of the '678 patent, Verizon has continued to directly and indirectly infringe one or more claims of the '678 patent, entitling ActiveVideo Networks to increased damages under 35 U.S.C. § 284 and to attorneys' fees and expenses incurred in prosecuting this action under 35 U.S.C. § 285.
- 22. Verizon's infringement has injured and damaged ActiveVideo Networks. ActiveVideo Networks is entitled to recover damages adequate to compensate ActiveVideo Networks for Verizon's infringing activities in an amount to be determined at trial, but in no event less than a reasonable royalty, together with interest and costs.
- 23. Verizon's acts of infringement will continue unless and until enjoined by this Court, irreparably damaging ActiveVideo Networks.

# SECOND CLAIM FOR RELIEF

## (Infringement of U.S. Patent No. 5,550,578 by Verizon)

24. ActiveVideo Networks realleges and incorporates by reference the allegations stated in paragraphs 1 through 23.

- 25. ActiveVideo Networks is the owner of United States Patent No. 5,550,578 (the '578 patent), entitled "Interactive And Conventional Television Information System." The '578 patent was duly and legally issued by the Patent and Trademark Office on August 27, 1996. A true and correct copy of the '578 patent is attached as **Exhibit 2**.
- 26. Verizon's FiOS system directly infringes at least independent claim 8 of the '578 patent at least because, as described previously, the FiOS system constitutes an interactive television information system coupled to a cable television system for delivering information services to subscriber televisions. The FiOS system includes at least an information source means, an information service distribution network, and interactive controllers. Furthermore, in response to requests received from a home interface controller, the FiOS system provides information services, such as video-on-demand, widgets, and interactive program guides, directly to the requesting home interface controller. An exemplary chart showing how an exemplary product, *i.e.*, the FiOS system and services related to video-on-demand, is believed to infringe claim 8 of the '578 patent is attached as **Exhibit 7**.
- 27. Verizon, by making, using, providing, offering for sale and/or selling in the United States interactive television systems, devices, and/or services, including the FiOS system and services, that are covered by one or more claims of the '578 patent, has not only committed acts of direct infringement, but also acts of contributory and/or inducement of infringement of one or more claims of the '578 patent. Verizon induces and or contributes to the infringement of the '578 by advertising to and allowing other companies that supply video-on-demand, widgets, and interactive program guides, and other services, to use the previously described FiOS system. ActiveVideo Networks understands that several companies currently provide content and other services to Verizon for use on the FiOS network. On information and belief, Verizon knew or should have known of the '578 patent for at least the reasons described in Paragraph 20, *supra*. These acts constitute violations of 35 U.S.C. § 271.
- 28. On information and belief, Verizon's infringement has been with full knowledge of the '578 patent for at least the reasons described in Paragraph 20, *supra*, and is, has been, and

continues to be willful and deliberate. Despite knowing of the '578 patent, Verizon has continued to directly and indirectly infringe one or more claims of the '578 patent, entitling ActiveVideo Networks to increased damages under 35 U.S.C. § 284 and to attorneys' fees and expenses incurred in prosecuting this action under 35 U.S.C. § 285.

- 29. Verizon's infringement has injured and damaged ActiveVideo Networks. ActiveVideo Networks is entitled to recover damages adequate to compensate ActiveVideo Networks for Verizon's infringing activities in an amount to be determined at trial, but in no event less than a reasonable royalty, together with interest and costs.
- 30. Verizon's acts of infringement will continue unless and until enjoined by this Court, irreparably damaging ActiveVideo Networks.

### THIRD CLAIM FOR RELIEF

## (Infringement of U.S. Patent No. 6,100,883)

- 31. ActiveVideo Networks realleges and incorporates by reference the allegations stated in paragraphs 1 through 30.
- 32. ActiveVideo Networks is the owner of United States Patent No. 6,100,883 (the '883 patent), entitled "Home Interface Controller for Providing Interactive Cable Television." The '883 patent was duly and legally issued by the Patent and Trademark Office on August 8, 2000. A true and correct copy of the '883 patent is attached as **Exhibit 3**.
- 33. Verizon's FiOS system directly infringes at least independent claim 1 of the '883 patent at least because, as described previously, the FiOS system provides interactive services on a cable television system that distributes television signals from a cable headend over an information service distribution network to a plurality of subscriber television sets. The FiOS system includes at least a node at which a request, from a home interface controller, for an information service in an interactive mode is detected. Furthermore, in response to requests received from a home interface controller, FiOS provides interactive sessions for delivering information services, such as video-on-demand, widgets, and interactive program guides, directly to the requesting home interface controller. An exemplary chart showing how an exemplary

- product, *i.e.*, the FiOS system and services related to video-on-demand, is believed to infringe claim 1 of the '883 patent is attached as **Exhibit 8**.
- 34. Verizon, by making, using, providing, offering for sale and/or selling in the United States interactive television systems, devices, and/or services, including the FiOS system and services, that are covered by one or more claims of the '883 patent, has not only committed acts of direct infringement, but also acts of contributory and/or inducement of infringement of one or more claims of the '883 patent. Verizon induces and or contributes to the infringement of the '883 by advertising to and allowing other companies that supply video-on-demand, widgets, and interactive program guides, and other services, to use the previously described FiOS system. ActiveVideo Networks understands that several companies currently provide content and other services to Verizon for use on the FiOS network. On information and belief, Verizon knew or should have known of the '883 patent for at least the reasons described in Paragraph 20, *supra*. These acts constitute violations of 35 U.S.C. § 271.
- 35. On information and belief, Verizon's infringement has been with full knowledge of the '883 patent for at least the reasons described in Paragraph 20, *supra*, and is, has been, and continues to be willful and deliberate. Despite knowing of the '883 patent, Verizon has continued to directly and indirectly infringe one or more claims of the '883 patent, entitling ActiveVideo Networks to increased damages under 35 U.S.C. § 284 and to attorneys' fees and expenses incurred in prosecuting this action under 35 U.S.C. § 285.
- 36. Verizon's infringement has injured and damaged ActiveVideo Networks. ActiveVideo Networks is entitled to recover damages adequate to compensate ActiveVideo Networks for Verizon's infringing activities in an amount to be determined at trial, but in no event less than a reasonable royalty, together with interest and costs.
- 37. Verizon's acts of infringement will continue unless and until enjoined by this Court, irreparably damaging ActiveVideo Networks.

# FOURTH CLAIM FOR RELIEF

### (Infringement of U.S. Patent No. 6,205,582)

- 38. ActiveVideo Networks realleges and incorporates by reference the allegations stated in paragraphs 1 through 37.
- 39. ActiveVideo Networks is the owner of United States Patent No. 6,205,582 (the '582 patent), entitled "Interactive Cable Television System With Frame Server." The '582 patent was duly and legally issued by the Patent and Trademark Office on March 20, 2001. A true and correct copy of the '582 patent is attached as **Exhibit 4**.
- 40. Verizon's FiOS system directly infringes at least independent claim 5 of the '582 patent at least because, as described previously, the FiOS system constitutes or includes a cable system headend connected to an information service distribution network for delivering information services to subscriber televisions each associated with a home interface controller. The FiOS system includes at least individually assignable processors for receiving data communications from an assigned home interface controller, a frame server, and a system manager. Furthermore, in response to requests received from a home interface controller, the FiOS system provides information signals and/or interactive pages directly to the requesting home interface controller. An exemplary chart showing how an exemplary product, *i.e.*, the FiOS system and services related to video-on-demand, is believed to infringe claim 5 of the '582 patent is attached as **Exhibit 9**.
- 41. Verizon, by making, using, providing, offering for sale and/or selling in the United States interactive television systems, devices, and/or services, including the FiOS system and services, that are covered by one or more claims of the '582 patent, has not only committed acts of direct infringement, but also acts of contributory and/or inducement of infringement of one or more claims of the '582 patent. Verizon induces and or contributes to the infringement of the '582 by advertising to and allowing other companies that supply video-on-demand, widgets, and interactive program guides, and other services, to use the previously described FiOS system. ActiveVideo understands that several companies currently provide content and other services to

Verizon for use on the FiOS network. On information and belief, Verizon knew or should have known of the '582 patent for at least the reasons described in Paragraph 20, *supra*. These acts constitute violations of 35 U.S.C. § 271.

- 42. On information and belief, Verizon's infringement has been with full knowledge of the '582 patent for at least the reasons described in Paragraph 20, *supra*, and is, has been, and continues to be willful and deliberate. Despite knowing of the '582 patent, Verizon has continued to directly and indirectly infringe one or more claims of the '582 patent, entitling ActiveVideo Networks to increased damages under 35 U.S.C. § 284 and to attorneys' fees and expenses incurred in prosecuting this action under 35 U.S.C. § 285.
- 43. Verizon's infringement has injured and damaged ActiveVideo Networks. ActiveVideo Networks is entitled to recover damages adequate to compensate ActiveVideo Networks for Verizon's infringing activities in an amount to be determined at trial, but in no event less than a reasonable royalty, together with interest and costs.
- 44. Verizon's acts of infringement will continue unless and until enjoined by this Court, irreparably damaging ActiveVideo Networks.

#### FIFTH CLAIM FOR RELIEF

### (Infringement of U.S. Patent No. 5,526,034)

- 45. ActiveVideo Networks realleges and incorporates by reference the allegations stated in paragraphs 1 through 44.
- 46. ActiveVideo Networks is the owner of United States Patent No. 5,526,034 (the '034 patent), entitled "Interactive Home Information System With Signal Assignment." The '034 patent was duly and legally issued by the Patent and Trademark Office on June 11, 1996. A true and correct copy of the '034 patent is attached as **Exhibit 5**.
- 47. Verizon's FiOS system directly infringes at least independent claim 1 of the '034 patent at least because, as described previously, the FiOS system constitutes an interactive television information system for providing interactive cable television service over a cable televisions system distribution network. The FiOS system includes at least an information

source and a node for selecting and providing information services to a home interface controller. Furthermore, the FiOS system enables home interface controllers to be placed in an interactive mode for the delivery of information services, such as video-on-demand, widgets, and interactive program guides. An exemplary chart showing how an exemplary product, *i.e.*, the FiOS system and services related to video-on-demand, is believed to infringe claim 1 of the '034 patent is attached as **Exhibit 10**.

- 48. Verizon, by making, using, providing, offering for sale and/or selling in the United States interactive television systems, devices, and/or services, including the FiOS system and services, that are covered by one or more claims of the '034 patent, has not only committed acts of direct infringement, but also acts of contributory and/or inducement of infringement of one or more claims of the '034 patent. Verizon induces and or contributes to the infringement of the '034 by advertising to and allowing other companies that supply video-on-demand, widgets, and interactive program guides, and other services, to use the previously described FiOS system. ActiveVideo Networks understands that several companies currently provide content and other services to Verizon for use on the FiOS network. On information and belief, Verizon knew or should have known of the '034 patent for at least the reasons described in Paragraph 20, *supra*. These acts constitute violations of 35 U.S.C. § 271.
- 49. On information and belief, Verizon's infringement has been with full knowledge of the '034 patent for at least the reasons described in Paragraph 20, *supra*, and is, has been, and continues to be willful and deliberate. Despite knowing of the '034 patent, Verizon has continued to directly and indirectly infringe one or more claims of the '034 patent, entitling ActiveVideo Networks to increased damages under 35 U.S.C. § 284 and to attorneys' fees and expenses incurred in prosecuting this action under 35 U.S.C. § 285.
- 50. Verizon's infringement has injured and damaged ActiveVideo Networks. ActiveVideo Networks is entitled to recover damages adequate to compensate ActiveVideo Networks for Verizon's infringing activities in an amount to be determined at trial, but in no event less than a reasonable royalty, together with interest and costs.

51. Verizon's acts of infringement will continue unless and until enjoined by this Court, irreparably damaging ActiveVideo Networks.

### PRAYER FOR RELIEF

WHEREFORE, ActiveVideo Networks requests that the Court enter judgment in favor of ActiveVideo Networks and against Verizon as follows:

- (a) adjudicating and declaring that Verizon has infringed, contributorily infringed, and actively induced others to infringe the '678, '578, '883, '582, and '034 patents;
- (b) preliminarily and permanently enjoining Verizon and its officers, directors, agents, servants, employees, parents, subsidiaries, principals and all persons in active concert or participation with them from further infringement of the '678, '578, '883, '582, and '034 patents;
- (c) awarding ActiveVideo Networks damages in an amount sufficient to compensate ActiveVideo Networks for Verizon's direct infringement, contributory infringement, and active inducement of others' infringement of the '678, '578, '883, '582, and '034 patents, but not less than a reasonable royalty;
- (d) awarding pre-judgment interest, costs, and expenses to ActiveVideo Networks pursuant to 35 U.S.C. § 284;
- (e) awarding increased damages, pursuant to 35 U.S.C. § 284, by reason of Verizon's willful infringement of the '678, '578, '883, '582, and '034 patents;
- (f) declaring this case exceptional under 35 U.S.C. § 285 and awarding ActiveVideo Networks its reasonable attorney fees, expenses, and costs incurred; and
- (g) granting ActiveVideo Networks such other and further relief as this Court may deem just and proper, or that ActiveVideo Networks may be entitled to as a matter of law or equity.

Dated: July 16, 2010

/s/Stephen E. Noona\_\_\_\_\_

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# **DEMAND FOR JURY TRIAL**

ActiveVideo Networks hereby demands a trial by jury.

Dated: July 16, 2010

/s/ Stephen E. Noona\_\_\_\_

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#### **CERTIFICATE OF SERVICE**

I hereby certify that on July 16, 2010, I will electronically file the foregoing with the Clerk of Court using the CM/ECF system, which will send a notification of such filing (NEF) to the following:

Gregory N. Stillman (also serving by hand-delivery)

Virginia State Bar No. 14308

Brent L. VanNorman (also serving by hand-delivery)

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